



UNITED STATES PATENT AND TRADEMARK OFFICE

AHA
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,856	06/13/2001	Susan M. Duncan	ADAP-1-1002	8532

25315 7590 03/05/2004

BLACK LOWE & GRAHAM, PLLC
701 FIFTH AVENUE
SUITE 4800
SEATTLE, WA 98104

EXAMINER

REIS, TRAVIS M

ART UNIT PAPER NUMBER

2859

DATE MAILED: 03/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/881,856	Applicant(s) DUNCAN, SUSAN M.	
	Examiner Travis M Reis	Art Unit 2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8-22,25,26 and 28-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8-22,25,26 and 28-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 14, 19-22, 25, 28, 33-35, 37, & 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bobrick in view of Marshall (U.S. Patent 1625041).

Bobrick discloses a design tool, system & method (see attachment) for use in association with design plans having hallways, doorways, stairways, rooms and other spaces of a known scale, for functional and space planning in the fields of architecture, interior design, and construction of residential and commercial structures (col. 1 lines 29-30 through col. 2 lines 1-9), comprising a two dimensional icon figure member (A) shaped as a human (B) seated in a wheelchair (C) with at least two wheels (D) supporting the chair of the icon figure member, the member having a base (E) engagable with the design plans (see attachment); the icon figure member attached to said base, said base equal to or greater than the diameter of the icon figure member (see attachment), and scaled (F) to indicate a turning radius to imitate & indicate the turning radius of a wheelchair support device (Figure 2) along the hallways, doorways, stairways, rooms and other spaces of the design plan to visually illustrate the feasibility of movement along the noted paths in light of the size and turning radius of the represented person.

Bobrick does not disclose the icon figure member is a three-dimensional figure.

Art Unit: 2859

Marshall discloses a device including a chart device & means which utilize three dimensional figures including various types of persons (30-32, 36) (Figures 3, 6, & 11) (page 2 lines 67-69). These figures are scaled to represent the proportionate relationship between objects (i.e. people, cars, etc.) within the chart device. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to shape the icon figure member figure shaped as a wheelchair or a human seated in a wheelchair disclosed by Bobrick into a three dimensional figure as taught by the various three dimensional persons disclosed by Marshall in order that the height of fixtures in the design plan are properly considered, the need for which is demonstrated in Figure 1 of Bobrick and since Marshall already suggests using 3D figures to convey information to a user.

3. Claims 3-6, 8, 9, 11-13, 15, 16, 18, 22, 26, 31, 32, & 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bobrick & Marshall as applied to claims 1, 14, 19-22, 25, 28, 31-35, 37, & 38 above and further in view of Stansbury (U.S. Patent 4276695).

With reference to claims 3, 8, 9, 11, 15, 16, 26, 31, & 32, Bobrick & Marshall disclose all of the instant claimed invention as stated above in the rejection of claims 1, 14, 19-22, 25, 28, 33-35, 37, & 38 but do not disclose a wand member with a first and second end extending from the icon figure member at any angle relative to the perpendicular, from an opening in the icon figure member wherein a first end of the wand member is maintained within the opening by frictional contact or a snap lock combination.

Stansbury discloses a roller measure device (30) with an opening (101) with a wand/handle member (44) wherein the wand/handle member is held within the opening

Art Unit: 2859

by frictional contact in order to push the device around easily (col. 6 lines 48-50) (Figure 5). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the opening and wand/handle member disclosed by Stansbury to the icon figure member disclosed by Bobrick & Marshall in order to pick up, place, and move the icon figure member around the plans more easily.

With reference to claims 11 & 18, Bobrick & Marshall do not disclose first and second

ridges along the opening and wand/handle member respectively to provide a snap lock combination.

Stansbury also discloses other types of connection means including snap lock combinations between two ridges (172, 173) on two pieces (52) of the wand/handle member (Figure 5).

Stansbury discloses other types of connection means including a connection means between two ridges (172, 173) on two pieces (52) of the wand/handle member that form a snap lock combination when placed together (Figure 9). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the ridge member disclosed by Stansbury to the opening and end of the wand/handle member disclosed by Bobrick & Marshall in order to have a snap lock combination, in order that the handle is securely connected to the design tool and since a snap lock combination is an common alternative means of connection.

4. Claims 10 & 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bobrick, Marshall, & Stansbury as applied to claims 3-6, 8, 9, 11-13, 15, 16, 18, 22, 26, 31, 32, & 36 above, and further in view of Riehle (U.S. Patent 4250642).

Bobrick, Marshall, & Stansbury disclose all of the instant claimed invention as

Art Unit: 2859

stated above in the rejection of claims 3-6, 8, 9, 11-13, 15, 16, 18, 22, 26, 31, 32 & 36 but do not disclose a metal plate located in the opening, and a magnet in the end of the wand/handle member, thereby providing a plate-magnet combination.

Riehle discloses a planning aid and that metal plates and magnetic planning elements connecting to said plates are common in the art (col. 1 lines 30-34). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the metal plate and magnet disclosed by Riehle to the design tool disclosed by Bobrick, Marshall, & Stansbury in order to provide a strong, but easily releasable connection means, and since a magnet and metal plate combination is an common alternative means of connection.

Response to Arguments

5. In response to Applicant's arguments that Bobrick is distinguishable since the template is static in nature and therefore generates "visual noise" and is cumbersome when moved: these arguments have been fully considered but they are not persuasive since there are no restrictions in Bobrick to preclude the movement of the template among design plans. Furthermore, applicant acknowledges that the template could be moved, albeit in a cumbersome way and with "visual noise" (page 11 of amendment filed 1/30/2004).

6. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., handles, cutouts, & shaped edges) are not recited in the rejected claim(s).

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). At best, applicant only claims a wand; however, this

Art Unit: 2859

feature is dealt with in the combination stated in paragraph 3.

7. In response to applicant's arguments against the references individually (i.e. the arguments detailing Marshall alone as stated in pages 12—14 of the amendment filed 1/30/2004), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, the claims are rejected over the combination of Bobrick and Marshall. Furthermore, Marshall is only used to show that it is very well known in the art to use 3D figures when trying to convey information to a user.

8. In response to applicant's argument that the examiner fails to provide any teaching or suggestion to combine the references of Bobrick and Marshall (i.e. a design template with a incident recreation device), this is not persuasive since the examiner recognizes that obvious-ness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Bobrick and Marshall teach the use of iconic figures in scale models and this combination is clearly stated in paragraph 2 of the office action. That the Marshall icons are used primarily for incident recreation does not preclude the reference from teaching the use of three dimensional figures to convey information to a user. The suggestion that representational icon figures may be shaped in three dimensions, as disclosed by Marshall, is what is being used to modify the icons in the design plans, already entailing the features of functional and space planning (i.e.

Art Unit: 2859

hallways, doors, etc.) to accurate scale, including a turning radius to imitate the turning radius of a support device by using a figure shaped as a human seated in a wheelchair, as disclosed by Bobrick, and therefore the combination is proper. Furthermore, Bobrick also denotes the recognition of the utility of a third dimension in icon figures illustrated in Figure 1, wherein height, besides turning radius, is considered.

9. In response to applicant's arguments that Bobrick is not designed to "visually illustrate the feasibility of movement along the noted paths in light of the size and turning radius of the represented person."; this argument is not persuasive because nothing in Bobrick precludes movement along the noted paths in light of the size and turning radius of the represented person and as applicant has acknowledged, it can be moved if so desired, albeit in a cumbersome fashion.

10. In response to applicant's arguments regarding the declarations filed, it should first be pointed out that only the declaration by Susan Duncan, the inventor, was received. This declaration was reviewed but was not persuasive because the declaration states that:

- in paragraph 4, the declaration states that Bobrick actually discloses wheelchair maneuverability & planning, which supports the examiner's position, although in a 2D context;
- in paragraph 5, the declaration states that static representations cannot be used to show actual maneuverability, however no reasons are used to support this position since although moving the "static representations" may be cumbersome, they are capable of doing so;
- no proper evidence has been provided showing the longfelt need as stated in paragraph 8 of the declaration, MPEP 716.04 gives some guidelines as to what

types of evidence should be provided to show longfelt need.

- no proper evidence has been provided showing commercial success as stated in paragraph 9 of the declaration. MPEP 716.03 gives some guidelines as to what types of evidence should be provided to show commercial success.

11. In response to applicant's argument that there is no suggestion to combine the references of Bobrick & Marshall and Stansbury (i.e. a three dimensional architectural design aide and a handle of a mechanical roller) with respect to claims 3, 8, 9, 11, 15, 16, 26, 31, & 32, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation for adding a handle/wand to Bobrick & Marshall to move the icon figures is stated in paragraph 3 above.

12. In response to Applicant's arguments with respect to claims 11 & 18 that Stansbury does not disclose using sonic welding or a snap lock combination to secure the handle to the roller measure device, these arguments have been fully considered but they are not persuasive since Stansbury does teach the use of sonic welding & snap lock combinations to secure two structures together, and therefore, this teaching may be used as an alternate means of joining any other two connectable parts together such as the handle disclosed by Stansbury to the icon figure taught by Bobrick & Marshall.

13. In response to applicant's argument with respect to claims 10 & 17, that Bobrick, Marshall, Stansbury & Riehle are nonanalogous art, it has been held that a prior art

Art Unit: 2859

reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Bobrick, Marshall & Riehle are all in the field of icon figure representation, while Marshall, Stansbury & Riehle are pertinent to the problem of movement of small devices and connection of one part to another within a device.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis M Reis whose telephone number is (571) 272-2249. The examiner can normally be reached on 8--5 M--F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for all communications.

Travis M Reis
Examiner
Art Unit 2859



Diego Gutierrez
Supervisory Patent Examiner
Technology Center 2800

tmr
March 2, 2004

SPACE FOR PEOPLE IN WHEELCHAIRS IS A FUNDAMENTAL DESIGN CONSIDERATION

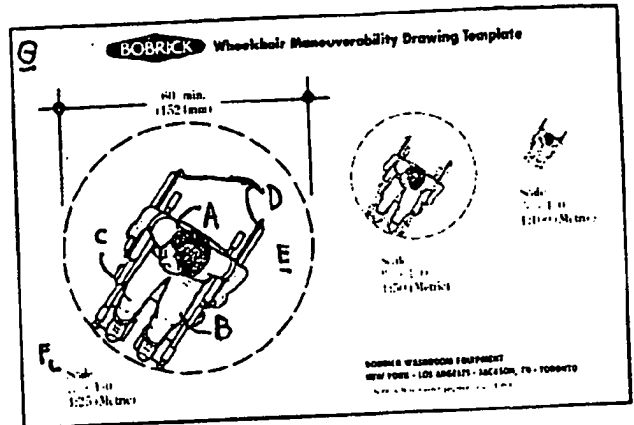
The needs of an adult seated in a wheelchair are commonly used as the standard of accessibility for barrier-free washrooms in terms of entrance, exit, and the proximity of equipment. By using the wheelchair perspective you can also accommodate a person using a walker, cane, or crutches. Consideration must also be given to the mounting heights of common accessories, such as mirrors, paper towel dispensers, waste receptacles, soap dispensers, napkin/tampon and condom vendors, and toilet partition-mounted equipment, including grab bars, toilet tissue and seal-cover dispensers, and sanitary napkin disposals.

CLEAR FLOOR SPACE to accommodate a single wheelchair must be at least 30" x 48" (760 x 1219mm). The space can be positioned for a *forward* or *parallel approach* to equipment (see ADAAG 4.2.4). A portion of the clear floor space may be located under fixtures, lavatories, or accessories as long as the required knee and toe clearance is provided (Fig. 4a). If properly centered in front of controls and operating mechanisms, the clear floor space will allow both left- and right-hand access to the equipment. Floor spaces may have to be wider if elements are placed in alcoves.

MOUNTING HEIGHT REQUIREMENTS for washroom accessories may vary within a facility depending on the location of individual accessories and the direction of reach required for their use. To allow *side reach* by people in wheelchairs, it is recommended that accessories be mounted with their dispensing mechanisms, start buttons, coin slots, or dispenser openings located 38" to 54" (965-1372mm) above the finish floor; and to ensure *forward reach* also, they must be located no more than 48" (1219mm) above the finish floor (Fig. 1). Where elements are mounted over obstructions, such as counters, they must be located no more than 44" (1118mm) above the finish floor. Mounting heights for children will differ from these given here and in ADAAG for adults. In facilities used predominantly by children appropriate adjustments in dimensions will be necessary.

TURNING SPACE at least 60" (1524mm) in diameter is required by a single wheelchair to make a 180-degree turn (Fig. 2a). A 60" x 60" (1524 x 1524mm)

T-shaped turning space with 36" (914mm) wide aisles to allow a three-point turn (Fig. 2b) is also acceptable and may be used to conserve space in some installations. A portion of the 60" (1524mm) diameter or T-shaped turning spaces may be located under fixtures, lavatories, or accessories as long as the required knee and toe clearance is provided (Fig. 1a).



Bobrick's wheelchair maneuverability drawing template.

Three plan views of a person in a wheelchair are illustrated in scales of 1/4" = 1'-0" (1:100 metric), 1/8" = 1'-0" (1:50 metric), and 1/16" = 1'-0" (1:25 metric). The template is printed on clear rigid plastic so it can be placed over drawings to confirm proper clearance and maneuverability within the installation plans. It is especially helpful in designing entrances, lavatory areas, and toilet compartments.

Fig. 1 Bobrick's Recommended Mounting Heights for Washroom Accessories

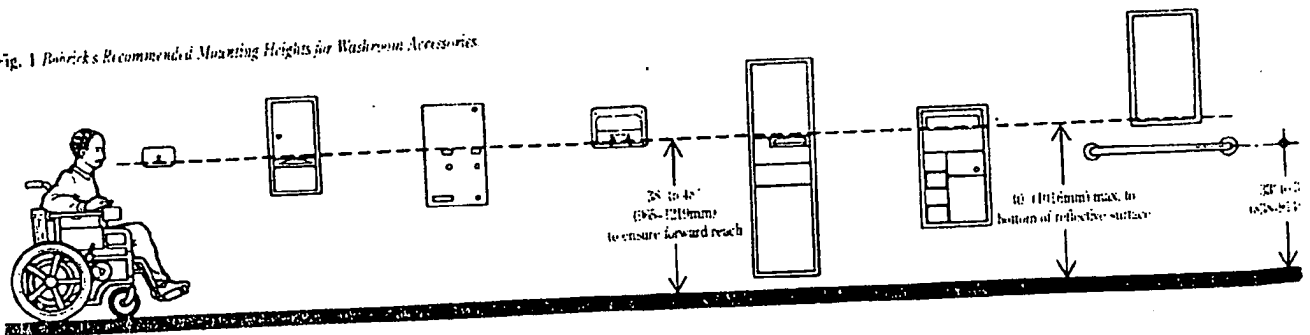


Fig. 2 Wheelchair Turning Space for 180° Turns

Scale: 1/4" = 1'-0"

